and "An attribute system" (Fredrickson, column 10, lines 1-60)." However, nowhere in the lines specified by the Examiner is the applicant able to find any description of an "attribute system." The portion of the patent referenced appears to describe the scan converter, the pixel color data formatter, the tile address/data MUX circuit, the pixel bus, and the frame buffer controller. The frame buffer controller disclosed by Fredrickson and described in this portion of the patent controls the reading of data from the frame buffer memory. The frame buffer controller disclosed by Fredrickson includes a capability of "the programmability of tile sizes" allowing different shapes and sizes of the pixel tiles to be read from the frame buffer memory. Applicant is unable to find anywhere in this portion of the patent that Fredrickson claims, teaches, or suggests the use of attribute data to allow the frame buffer controller to select between a plurality of logical regions of frame buffer memory.

4. The Examiner also contended that, "Fredrickson's (X, Y, Z) coordinate and color attributes (R, G, B) or overlay data (memory RAM 98) suggests the storing of "logical regions and attribute data" as claimed." However, nowhere does the Fredrickson patent, claim, teach, or suggest the use of attribute data to select which logical regions of frame buffer memory to read in displaying a given tile of pixels. In the Fredrickson patent, when a tile of pixels is to be displayed on the screen, the corresponding tile is read from all of the logical regions of memory and later calculations are performed to determine which logical region to use, then the tiles from the other logical regions are discarded, wasting the memory unit bandwidth that was used in reading data from the other logical regions. The "coordinate[s] and color attributes" referred to by the Examiner are simply the

location and color of a given pixel, they have no relationship to the logical region of memory to access for a given tile of pixels.

5. The "overlay data" cited by the Examiner (reference character "98" in the Fredrickson patent) are described by Fredrickson (col. 2, lines 2-8) as, "Attributes include the RGB intensities, and in many systems ON and OFF for pixels in an "overlay" plane that is merged with data in other planes. For instance, an overlay plane might contain a cursor, and the presence of a bit in the overlay plane might force saturation intensity for all three electron guns, regardless of the actual RGB values for that pixel." Thus, what Fredrickson terms "attributes" are simply the color of a given pixel, and ON or OFF information for that pixel from the overlay data array. As described in the specification, applicant's invention uses attribute data referring to the logical region(s) of memory to be accessed for the display of a given tile of pixels. Within that logical region of memory are the RGB values for the pixels within the given tiles. (The overlay data is stored in a separate memory location and its location is not essential to applicant's invention.) Thus, applicant believes that the limitations of an attribute system [that] selects graphics data from fewer than all of said logical regions based on said attribute data are clearly distinguished from the Fredrickson patent.

6. The Examiner contended that, "Alcorn teaches that such attribute data is well known in the art (Alcorn, column 4, lines 29-35)." This portion of the Alcorn patent states, "The CTI simultaneously interprets a number of pixel parameters, for example, red, green and blue (RGB), specular and diffuse parameters, alpha (x,y) parameters, and texture parameters; while the ZI only interpolates x, y, and z

values." These "pixel parameters" described by Alcorn are not equivalent to applicant's attribute data since the "pixel parameters" do not include information regarding which subset of multiple logical regions of memory contain valid pixel data to be retrieved. Applicant is unable to find anywhere within the Alcorn patent a claim, teaching, or suggestion of <u>an attribute system</u> ... [that] <u>selects graphics data from fewer than all of said logical regions based on said attribute data</u>. Thus, applicant believes that claim 1 has been adequately distinguished from the Fredrickson and Alcorn patents and is in a condition suitable for allowance.

7. The Examiner also contended that, "Claim 2 adds into claim 1 that the graphics data and attribute data are stored in physically separate memory which Fredrickson teaches in figure 2B with different memory planes." However, as discussed above, Fredrickson does not claim, teach, or suggest <u>an attribute system</u> ... [that] <u>selects graphics data from fewer than all of said logical regions based on said attribute data</u>. Thus, while the different memory planes disclosed by Fredrickson may comprise physically separate memory devices, since Fredrickson does not disclose attribute data capable of distinguishing between logical regions of frame buffer memory, applicant's claims are distinguished from the invention disclosed in the Fredrickson patent. Thus, applicant also believes that claim 2 has been adequately distinguished from the Fredrickson and Alcorn patents, and is therefore in a condition suitable for allowance.

8. Claims 3-6, 7-8, and 9-10 were rejected for similar reasons to claims 1 and 2. Applicant respectfully suggests, that since claims 1 and 2 have been distinguished

from the inventions of Fredrickson and Alcorn, claims 3-6, 7-8, and 9-10 are

similarly distinguished from the inventions of Fredrickson and Alcorn.

9. For these reasons, this application is considered to be in condition for allowance

5   and such action is earnestly solicited.

10   Respectfully submitted,

by _____

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